

## CALIFORNIA BUILDING CODE (2006 IBC) PUBLIC PROPOSAL FORM

PLEASE SEE REVERSE FOR INSTRUCTIONS ON SUBMITTING PUBLIC PROPOSALS. PROPOSALS MUST COMPLY WITH THESE INSTRUCTIONS.

	Indicate the format in which you would like to receive your Public Proposals Monograph (PPM), Report of the Hearing (ROH) and Final Action Agenda (FAA):  X Paper * CD * Download from ICC Website									
	L									
		•	ote: A paper copy will not		•			,		
2)	PLEASI	E TYPE OR PR	INT CLEARLY: FOI	RMS WIL	L BE RETURN	IED if they	contain u	nreadab	le informa	ation.
	Name:	Rick Thornb	perry, P.E.					Date:	12-23-05	5
	Jurisdiction/Company:		The Code Consort	ium, Inc.						
	Submitted on Behalf of:		Alliance for Fire an	d Smoke	Containment a	nd Control	(AFSCC)			
	Address:	2724 Elks V	Vay							
	City:	Napa		State:	CA	Zip +4:	94558-3	500		
	Phone:	(707) 253-263	33	Ext:		Fax:	(707) 25	3-2639		
	e-mail:	thecodeinc@a	aol.com							
3)	*Signature:  *I hereby grant and assign to ICC all nonexclusive rights in copyright I may have in any authorship contributions I make to ICC in connection with this proposal. I understand that I will have no rights in any ICC publications that use such contributions in the form submitted by me or another similar form and certify that such contributions are not protected by the copyright of any other person or entity.  Cost Impact: Indicate if this Proposal:  will will not increase the cost of construction.									
	* I herek this proj	by grant and assig posal. I understa form and certify th	and that I will have no rig	ghts in any	ICC publications	that use suc right of any	ch contribution other perso	ons in the n or entity	form submit '.	CC in connection with ted by me or another
.)	*I herek this pro similar t Cost Im	by grant and assig posal. I understa form and certify th pact: Indica	and that I will have no rignat such contributions a	ghts in any re not prot will	v ICC publications tected by the copy will n	that use suc right of any ot incre	ch contribution other personate the contribution of the contributi	ons in the n or entity st of cons	form submit struction.	CC in connection with ted by me or another
.)	*I herek this prop similar t Cost Im Indicate	by grant and assig posal. I understa form and certify th npact: Indica appropriate Intervention	and that I will have no rignat such contributions and te if this Proposal:	ghts in any re not prot will ssociated ination ch	vICC publications tected by the copy will n with this Public nange to another	that use suc vright of any ot incre c Proposal er I-Code, p	ch contribution other personate the contribution of the contributi	ons in the n or entity st of cons	form submit c. struction. nym:	ted by me or anothe
)	*I herek this prop similar t Cost Im Indicate	by grant and assig posal. I understa form and certify the npact: Indical appropriate Inter- ave also submit- ick of this form f	and that I will have no rig nat such contributions and the if this Proposal: [ ernational Code(s) as ted a separate coord or list of names and a	ghts in any re not prot will ssociated ination ch	rICC publications tected by the copy will n with this Public nange to another	that use suc vright of any ot incre c Proposal er I-Code, p	ch contribution other personate the contribution of the contributi	ons in the n or entity st of cons	form submit  struction.  ym:  code:	ted by me or anothe
)	*I herek this prop similar t  Cost Im Indicate If you ha (See ba  Revision to	by grant and assign posal. I understate form and certify the support of the suppo	and that I will have no rig nat such contributions and the if this Proposal: [ ernational Code(s) as ted a separate coord or list of names and a	ghts in any re not prot will ssociated ination ch	rICC publications tected by the copy will not with this Public nange to another for the Internation	that use suc yright of any ot incre c Proposal er I-Code, p tional Code	ch contribution other personate the contribution of the contributi	ons in the n or entity st of cons	form submit  struction.  ym:  code:	ted by me or anothe
)	*I herek this prop similar t  Cost Im Indicate If you ha (See ba  Revision to	by grant and assign posal. I understate form and certify the support of the suppo	and that I will have no rig nat such contributions and the if this Proposal: [ ernational Code(s) as ted a separate coord or list of names and a	will ssociated ination chacronyms	will n with this Public ange to anothe for the Interna	that use suc yright of any ot incre c Proposal er I-Code, p tional Code	ch contribution other personals the contribution of the contributi	ons in the n or entity st of cons se Acron cate the cate	form submit	ted by me or anothe
(i) (i) (i) (i)	*I herek this prop similar t  Cost Im Indicate If you ha (See ba  Revision to  PROPOSAL  Revise	by grant and assigned posal. I understate form and certify the second appropriate Interest of this form form form and second appropriate Interest of this form form form form form form as follows:	and that I will have no rigat such contributions and the if this Proposal:  ernational Code(s) as ted a separate coord for list of names and a separate box:  Add new text as formational that is a separate box:	will ssociated ination chacronyms  X	will n with this Public anange to anothe for the Interna Table  X Delete an	that use suc yright of any ot incre c Proposal er I-Code, p tional Code 503	ch contribution other person ease the contribution of the contribu	ons in the n or entity st of cons se Acron cate the cate	form submit	IBC
i) 5) 5) 7)	*I herek this proposimilar to Cost Im Indicate If you had (See ba) Revision to PROPOSAL Revise how the proposition	by grant and assigned posal. I understate form and certify the second paper opening and submitting are also submitting the second paper opening as follows:	and that I will have no rigat such contributions and the if this Proposal:  ernational Code(s) as ted a separate coord or list of names and a classification.  ck appropriate box:  Add new text as for SED or DELETED TEX	will ssociated in any material will ssociated in ation chacronyms  X  Willows  X  In legis	will n with this Public ange to anothe for the Interna Table  X Delete an	that use suc yright of any ot incre c Proposal er I-Code, p tional Code 503	ch contribution other person ease the contribution of the contribu	st of cons se Acron cate the c Figure class consecution of the consecu	form submit  struction.  nym:  code:  Delete with	IBC  nout Substitution(s
i) 5) 5) 7)	*I herek this proposimilar to Cost Im Indicate If you had (See ba) Revision to PROPOSAL Revise how the proposition	by grant and assigned posal. I understate form and certify the second paper opening and submitting are also submitting the second paper opening as follows:	and that I will have no rigat such contributions and the if this Proposal:  ernational Code(s) as ted a separate coord for list of names and a separate box:  Add new text as formational that is a separate box:	will ssociated in any material will ssociated in ation chacronyms  X  Willows  X  In legis	will n with this Public ange to anothe for the Interna Table  X Delete an	that use suc yright of any ot incre c Proposal er I-Code, p tional Code 503	ch contribution other person ease the contribution of the contribu	st of cons se Acron cate the c Figure class consecution of the consecu	form submit  struction.  nym:  code:  Delete with	IBC  nout Substitution(s

## **TABLE 503 ALLOWABLE HEIGHT AND BUILDING AREAS**

Height limitations shown as stories and feet above grade plane. Area limitations as determined by the definition of "Area, building", per floor

		TYF	PEI	TYF	PE II	TYP	E III	TYPE IV	TYP	ΕV
		Α	В	А	В	А	В	HT	Α	В
	Height (ft)	UL	160	65	55	65	55	65	50	40
Group	Height(S)									
A-1, A-2, A-3, A-4 > 1000	S A	UL UL	4 29,900			No	ot Permitted	I		

A-1, A-2, A-3, A-4	S A	UL UL	4	2 13,500	NP NP	2	NP NP	2	2	NP NP
>300 < 1000			29,900	-,		13,500		13,500	10,500	
Any A	S A	UL UL	12 29,900	2 13,500	1	2	1	2	2	1
<u>≤</u> 300			,	,	9,100	13,500	9,100	13,500	10,500	6,000
B, F-1, M, S-1	S A	UL UL	12 39,900	4 18,000	2 12,000	4	2 12,000	4	3	2
						18,000		18,000	14,000	8,000
E, I-4	S A	UL UL	4 45,200	2 20,200	1	2	1 13,500	2	2	1
<b>F</b> 0 0 0			40	4	13,500	20,200		20,200	15,700	9,100
F-2, S-2	S A	UL UL	12 59,900	4 27,000	2 18,000	4	2	4	3	2
			•			27,000	18,000	27,000	21,000	12,000
I-1	S	UL	3	2	NP	2	NP	2	2	NP
	A	UL	15,100	6,800	NP	6,800	NP	6,800	5,200	NP
I-2	S	UL	3	1	NP	1	NP	1	1	NP
	A	UL	15,100	6,800	NP	6,800	NP	6,800	5,200	NP
I-3	S A	UL UL	2 15,100			No	t Permitted	7		
R-1, R-2,	S	UL	12	4	<b>2</b> <sup>9</sup>	4	<b>2</b> <sup>9</sup>	4	3	2 <sup>9</sup>
R-4 <sup>a</sup>	Α	UL	29,900	13,500	0.4009	40 =00	0.4009	40 =00	40 =00	0.0009
D 0		1.11		0	9,100 <sup>9</sup>	13,500	9,100 <sup>9</sup>	13,500	10,500	6,000 <sup>9</sup>
R-3	S	UL	3	3	3	3	3	3	3	3
	Α					Unlim	ited			
H-1	S	1	1	1	1					
	Α	15,000	12,400	5,600	0.700		No	ot Permitted		
H-2	S	UL UL	2	1	3,700 1	1	1	1	1	1
Π-2	S A	15,000	12,400	5,600	1	1	1	5,600	ı	1
	, ,	10,000	,	3,000	3,700	5,600	3,700	3,000	4,400	2,500
H-3	S	UL	5	2	1	2	1	2	2	1
	Α	UL	24,800	11,200	7.500	44.000	7,500	44.000	0.000	F 400
11.4.11.5			3	3	7,500	11,200 3	-	11,200 3	8,800	5,100
H-4, H-5	S A	3 UL	39,900	18,000	2		2		3	1
U	S	UL	5	4	12,000 2	18,000 3	12,000 2	18,000 4	14,000 2	8,000 1
	A	UL	J	4	2 8,500	3	2 8,500	4	9,000	'
		_	35,500	19,000	.,	14,000	.,	18,000	.,	5,500

## NP - Not Permitted.

A - Floor area per story in square feet (x 0.093 for m²)

H - Building height in number of stories.

UL - Unlimited.

<sup>&</sup>lt;sup>a</sup> - Group R-4 occupancies shall not be greater than 2 stories in height and shall be of not less than 1 hour fire-resistive construction throughout where the second story exceeds 3,000 square feet.

- 1	İ				
	PROPOSAL	Continued	(Attach additional	sheets as	necessary)

8) SUPPORTING INFORMATION (State purpose and reason, and provide substantiation to support proposed change):

This proposed amendment simply takes Table 5-A out of the 1997 Uniform Building Code (UBC) and replaces Table 503 in the 2006 ICC International Building Code (IBC). Table 5-A has also been modified using the appropriate IBC occupancy classifications substituted for the UBC use groups and the appropriate IBC types of construction designations substituted for the UBC types of construction. Thus, the height and area limits specified in the IBC are deleted and replaced with those specified in the 1997 UBC upon which the 2001 California Building Code (CBC) is based.

In addition, several sections of the IBC are proposed to be revised by separate proposed amendments to make the height and area requirements, including modifications for increases in heights and areas, more consistent with the UBC. Section 504.2 Automatic Sprinkler System Increase has been proposed to be revised to eliminate the height increase allowed for residential occupancies sprinklered in accordance with NFPA 13R since the UBC does not allow any trade-offs or allowances for the use of a residential sprinkler system. Section 504.2 is also proposed to be revised to indicate that the height increase permitted is limited to one story without an increase in building height based on feet and the height increase can only be allowed when the automatic sprinkler system is installed in accordance with NFPA 13, not NFPA 13R. This is consistent with the UBC which does not allow an increase in height or area for buildings protected with a residential sprinkler system. Presently, the 2006 IBC will not only allow a one story height increase, but also a 20 foot height increase in actual building height. This section was also amended to not allow the use of both a story height increase and an area increase with the installation of an automatic sprinkler system since the IBC will allow both increases to be used in the same building.

And, Section 506.3 Automatic Sprinkler Increase has been proposed to be modified to not allow the increase in building area if an increase in building height is taken as similarly discussed above for Section 504.2. Section 506.4 Area Determination has also been modified to limit the maximum floor area of a multistory building to twice that allowed for a single story building which is consistent with the UBC as compared to the IBC which allows tripling the single story building area for multistory buildings.

The reason for these significant proposed amendments to the IBC is to assure that the present level of fire and life safety being constructed into buildings under the 1997 UBC will be maintained when the IBC is adopted. Otherwise, the adoption of the 2006 IBC without the substituted height and area table and related amendments, in effect, will "lower the bar" for built-in fire resistive and noncombustible construction that has been provided under the UBC. This lowering of the bar over time will result in greater property damage and the potential for more injuries and deaths caused by fires. This will also have an impact on fire fighter safety since buildings will be able to be built much larger without having to provide the same degree of fire resistance nor limit the use of combustible construction.

We can make this statement because we have conducted an analysis of the allowable heights and areas permitted by the IBC as compared to the 1997 UBC. The analysis clearly shows that for the vast majority of cases, especially for the higher types of construction, the IBC will allow substantially greater areas and taller buildings than the 1997 UBC. This has also been substantiated in two articles authored by Mark Kluver of the Portland Cement Association who made a comparison of the International Building Code (IBC) to the UBC for height and areas for certain occupancy classifications. It is also interesting to note the differences in the fire loss records for various regions of the country as compared to the western region where the UBC is the dominant code adopted. These comparisons are shown and discussed in the two articles referenced above.

The IBC allows significantly greater areas and heights than the UBC for several reasons. First, the base allowable heights and areas were developed using the "lowest common denominator" approach which, in essence, took the greatest allowable heights and areas of any of the three regional model building codes for each occupancy (use group) and put them in the table as the base value. The stated purpose for that was to not cause existing buildings in any part of the country to be nonconforming with the IBC. Furthermore, the IBC allows the practice of "double dipping". This is the case where the building allowable area, as well as the building allowable height, is permitted to be increased with the installation of an automatic sprinkler system. As stated above, the UBC does not permit both increases to be taken in the same building. So under the UBC the designer needs to decide whether to use the sprinkler system for an increase in allowable area or, as an alternative, for an increase in the allowable height of a building. Another factor involves the total building area limit for multistory buildings. The UBC places a limit of twice that allowed for a single story building, whereas the IBC allows a tripling of the single story building area for buildings that are three or more stories in height. This can result in a significantly greater allowable area as compared to the UBC.

We should point out that during preliminary studies of the adoption of the 2000 IBC by Clark County, NV, their comparisons of the allowable heights and areas between the UBC and the IBC raised significant concerns. The Clark County, NV, code enforcement officials have expressed concerns that they need to be able to maintain the level of fire and life safety they currently provide based on their adoption of the 1997 UBC which will require significant amendments to the IBC including the height and area tables to achieve that. We would refer you to a website where this process has been documented and made available for public review. It is www.co.clark.nv.us/development\_services/bldg\_codes/00ibc\_amend.pdf.

SUPPORTING INFORMATION	Continued (Attach additional sheets as necessary)
 _	

C:\Documents and Settings\The Code Consortium\My Documents\CCWin9\MyFiles\WPDOCS\FORMS\AFSCC CBC 2006 IBC Public Proposal Form Table 503 05.12-15.doc